PATENT ABSTRACTS OF JAPAN

REF. 2

(11)Publication number: 2002-160948

(43)Date of publication of application: 04.06.2002

(51)Int.CI. C04B 12/02 A61K 6/06 A61L 27/00 C01B 25/32 C04B 28/34

(21)Application number: 2000-319981 (71)Applicant: RINCHIN KINKEI

SHU KENHEI

(22)Date of filing: 19.10.2000 (72)Inventor: RINCHIN KINKEI

SHU KENHEI CHIN BUNSEI

(54) CALCIUM PHOSPHATE CEMENT, ITS USE AND METHOD OF MANUFACTURE

(57) Abstract:

PROBLEM TO BE SOLVED: To provide rapidly hardening calcium phosphate cement. SOLUTION: The cement comprises calcium phosphate particles with a particle diameter of $0.05-100~\mu$ m having whiskers with width of $1-100~\mathrm{nm}$ and length of $1-1,000~\mathrm{nm}$ or microfine crystals on their surfaces, which are prepared by mixing calcium phosphate powder or particles with a wetting agent and controlling the growth of whiskers or microfine crystals on their surfaces.

LEGAL STATUS [Date of request for examination] 19.10.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3574396

[Date of registration] 09.07.2004

[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Brief of the cited document 2 (JP,2002-160948,A)

This invention relates to calcium phosphate cement.

The preferred process of manufacture includes; combining the powder of calcium phosphate with the water solution. This calcium phosphate cement comes into the paste, and this paste is non-dispersive material used for the filing material for teeth.

The powder of calcium includes such as calcium dihydrogenphosphate, hydrate-calcium dihydrogenphosphate, acidic calcium pyrophosphate, anhydrous calcium hydrogen phosphate, calcium metaphosphate.

In the preferred embodiment, the diameter of the particle of the calcium is about 0.2-80

µm, preferably 0.5-50µm.

On the other hand, the water solution comprises the phosphate ion, calcium ion, fluorine ion as the accelerator.